

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005738**Date Inspected:** 10-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1600**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, Oregon**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Hinge K Pipe Beams**Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Oregon Iron Works, Inc. (OIW) jobsite in Clackamas, Oregon for the purpose of observing fabrication of the Hinge K Pipe Beams.

OIW Fabrication Shop-Bay 1:

QA Inspector Brannon randomly observed OIW personnel and 1 helper continuing in Bay 1 at the CNC mill for facing hinge k pipe beam post tension cap plate (A825M) MK#a109 in preparation for welding.

OIW Fabrication Shop-Bay 3 (repair CWR-2244-002):

QA Inspector Brannon observed OIW welder Mr. Craig Jacobson ID#J6 and Forman Mr. Troy Smith preheating and repair welding CWR-2244-002 hinge K pipe beam section A111-3 (A508 Gr. 4N Class 2). The complete joint penetration (CJP) weld is identified as weld joint #W2-6. Mr. Jacobson was observed welding in the 1G (flat) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Enis-G-H21 hand held semi-automatic. QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Rob Walters verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon appear to be in general compliance with the approved WPS 4016 revision number 0. After completion of the repair QA observed Mr. Jacobson and Mr. Smith cover the surrounding area with k-wool blankets and using a hand held flame torch to maintain heat on the repair as required per OIW CWR-2244-002 repair procedure for the post weld heat treatment (PWHT). OIW maintained the PWHT for 1 hour as required.

OIW Fabrication Shop-Bay 3:

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

QA Inspector Brannon randomly observed OIW qualified welder's Mr. Craig Jacobson ID#J6 and Mr. Tim O'Brien ID#O6 joining ring stiffener plate MK#a125 (HPS 485 W) to hinge K pipe beam fuse half section MK#a124-7 (HPS 485W). The partial joint penetration (PJP) weld is identified as weld joint #WM3-15. Mr. Jacobson was observed welding in the 1G (flat) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Eni5-G-H2. QA Inspector Brannon observed the OIW QC CWI Inspector's Mr. Mike Gregson and Mr. Rob Walters verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon appear to be in general compliance with the approved WPS 4020 revision number 0.

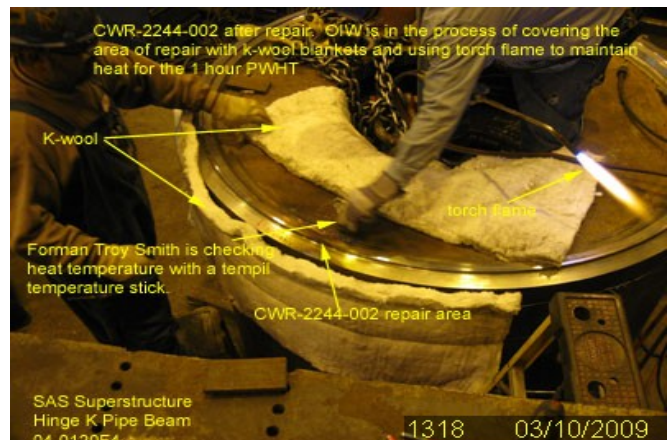
OIW Fabrication Shop-Bay 3:

QA Inspector Brannon randomly observed OIW personnel preparing positioner for welding forging MK#a111 (A508 Gr. 4N Class 2) to base plate ML#a110 in preparation for welding.

Material, Equipment, and Labor Tracking:

QA Inspector Brannon performed a verification of personnel at OIW. QA Inspector Brannon observed 2 Supervisor's, 3 Quality Control and 6 production personnel on this date.

The following digital photograph below illustrates observation of the activities being performed.



Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By: Brannon, Sherri

Quality Assurance Inspector

Reviewed By: Adame, Joe

QA Reviewer